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# THE INSECT PEST SURVEY BULLETIN

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A monthly review of entomological conditions throughout the United States

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BUREAU OF ENTOMOLOGY  
UNITED STATES  
DEPARTMENT OF AGRICULTURE  
AND  
THE STATE ENTOMOLOGICAL  
AGENCIES COOPERATING



## OUTSTANDING ENTOMOLOGICAL FEATURES FOR OCTOBER, 1922.

This number brings to a close Volume 2 of the Insect Pest Survey Bulletin. An index will appear within the next few weeks and be followed later in the winter by an annual summary.

During the month the false wireworms have proved to be much more seriously abundant than usual in western Nebraska, Kansas, and Oklahoma. In parts of Kansas planting has been discontinued owing to the depredations of these pests. This is correlated with a heavy drought which prevented germination of the grain.

The chinch bug is going into hibernation in Indiana, Illinois, and Nebraska in large numbers. Weather conditions so far have been very favorable for this pest. It is spreading northward in Indiana to the northernmost boundary of the State.

The corn earworm is much less abundant throughout its entire range than was the case last year, with the exception of a rather serious outbreak in Dallas County, Tex.

No alarming spread or intensification of infestation of the European corn borer has been noted in any of the more westerly areas in the United States this year. The conditions in Ohio and Michigan, except for a slight spread in the contiguous territory, remain much the same as those prevailing in the fall of 1921.

The fall armyworm has been unusually abundant this year in Kansas and New Mexico. Less important outbreaks are reported from Iowa and Indiana.

The Mexican bean beetle has been recorded from 10 new counties in Kentucky. It is now known to be present over practically the entire central area of this State. During the month it has also been reported from 4 new counties in western North Carolina.

The pea aphid has attracted such general attention during the past season in the cannery sections as to occasion the calling of a general conference on this pest to be held in Chicago early in November.

The outbreak of the spruce budworm which developed in Maine last year seems to be waning. This is reported as undoubtedly one of the most serious outbreaks of this pest ever recorded in North America.

The Japanese beetle has developed a new interest, doing serious damage to putting greens on golf links.

Cases of dengue fever to the number of 3,982 have been reported up to October 21 in Louisiana, 3,476 cases have been reported up to October 28 in Dallas, Tex., and serious outbreaks reported from a number of the other important cities in this State.

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## CEREAL AND FORAGE - CROP INSECTS

WHEATHESSIAN FLY (Phytophaga destructor Say)

Illinois W. P. Flint (October 20). "The fly-free date will apparently hold good throughout the State with the exception of a very slight infestation in northern Illinois; here wheat should be sown a day or two after the advised seeding date."

Kansas J. W. McColloch (September 27). "Fall emergence began in Riley and Wabaunsee Counties about September 21. Eggs are numerous on volunteer wheat. Wheat planting is well under way. An examination of many fields of volunteer wheat in central Kansas on September 26 showed a general light infestation. In the southern part of Saline County eggs were hatching."

A FALSE WIREWORM (Eleodes opaca Say)

Nebraska M. H. Swenk (October 1). "Hundreds of acres of unsprouted winter wheat have been destroyed by this pest during the present month in the vicinity of Big Spring, Deuel County, while lying in the dry soil."

Kansas J. W. McColloch (September 27). "The weather has been dry and hot. Wheat planting is under way but the soil is dry and germination is slow." (October 20) "The abundance of this pest in the western part of the State has greatly increased. The fall has been dry and seed has been in the ground from three to five weeks without germinating. At Sublette worms have taken whole fields; at Selden worms are thick in thousands of acres; in many fields in Greeley and Wichita Counties the damage ranges from 40 to 75 per cent. At Liberal on October 9th it was estimated that 50 per cent of the wheat was taken, and at Plains the farmers stopped drilling."

Oklahoma J. W. McColloch (October 20). "We have reports of this insect from Tyrone, Okla., in which it is stated that injury is occurring throughout the northwestern part of that State."

WIREWORMS (Phelates sp.)

North Dakota C. N. Ainslie (May 22). "In a field of young wheat, just across the road from a cornfield at Beach, N. Dak., I took within a minute or two about a dozen specimens of a slender gray elaterid that I had never seen previously. These were, apparently, congregated within a small area, for further search produced no more of them in the vicinity."





CORN

EUROPEAN CORN BORER (Pyrausta nubilalis Huebn.)

New England W. R. Walton (Bureau of Entomology October 25). "In New England the natural spread observed late in the present season has been unexpectedly extensive; 34 new towns have so far been found infested in Massachusetts. The western border of the infestation now embraces the town of Worcester. The southwestern edge of this area has progressed across the eastern border of Rhode Island and now embraces five towns in that State. To the northward an extensive new wedge of infestation has progressed up the Merrimac Valley in New Hampshire as far as Bristol, and the total number of towns so far found infested in this State is 25. A similar spread has been noted in the southwestern corner of Maine, where 11 new towns have been found infested, the most northerly of which are Saco and Lyman. The northern edge of this infestation has not yet been definitely located.

"The factors involved in the production of this unusual dispersion of moths are believed to be about as follows: In 1918 and the early part of 1919 large areas of vacant land bearing heavily infested weeds and growths of wild plants were extensively treated by the United States Department of Agriculture by means of fire, etc., in order to destroy the millions of corn borers which were breeding in them. This, it is believed, prevented wide dispersal. Since that time, however, funds have not been available for this purpose, and nothing has been done to diminish the production of moths from these extensive areas of weeds, consisting of vacant city lots, abandoned market garden areas, etc., and, as a consequence, the insects have bred by millions continuously for two years and are now seeking better feeding conditions elsewhere. They have naturally followed the prevailing winds to the northward and have entered the fertile Merrimac Valley along the lines of least resistance, and have flown up the coast of Maine in a similar manner. The past summer has been almost unprecedented in eastern Massachusetts as a favorable one for the growth of weeds, and it seems obvious that a very heavy second generation of moths has occurred as a result of conditions prevailing there. It is estimated that in the Mystic Park weed area at Arlington, Massachusetts, a very extensive tract, there exists a corn borer population of approximately 406,000 per acre. Some of the smaller areas were found to harbor a population of at least one million borers per acre."

New York W. R. Walton (Bureau of Entomology October 25). "In western New York there has been an extensive spread eastward in the direction of the prevailing winds, including 47 new towns. The eastern edge of this infestation projects to the eastern border of Wyoming County. The County of Niagara in the northwestern corner of the State, immediately east of the Niagara River, has been found completely infested this year, and it is believed that most of the spread observed in this particular area has been caused by the flight of moths from the heavily infested districts in Ontario.

THE HISTORY OF THE  
CITY OF BOSTON

From the first settlement of the city in 1630 to the present time. The city of Boston was founded by a group of Puritan settlers who came to the Massachusetts Bay in 1630. They were led by John Winthrop, who gave the city its name. The city grew rapidly and became one of the most important cities in the New England. It was the site of many important events in the history of the United States, including the Boston Tea Party and the Battle of Boston. The city is known for its many historic landmarks, including the Freedom Trail and the Boston Common.

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This theory is borne out by the fact that there has been little, if any, apparent intensification in infestation in the area immediately south of Buffalo in New York State. In eastern New York a total of 18 new towns have been found infested. They are all contiguous to the territory infested last year. The intensity of infestation in this area has also remained almost stationary."

Pennsylvania W. R. Walton (Bureau of Entomology October 25). "In Pennsylvania nine new counties have been discovered infested, contiguous to the territory of last year, but some of these are situated on the extreme head-waters of the Alleghany River, showing that the insect is extending slightly beyond the watershed separating the Ohio Basin from the low-lying region immediately surrounding Lake Erie."

Ohio W. R. Walton (Bureau of Entomology October 25). "In Ohio 25 new towns have been found infested, all contiguous to the territory of last year. The maximum rate of infestation observed in this State occurs in the neighborhood of Ashtabula, and is estimated at from 2 per cent to 5 per cent. Elsewhere the infestation apparently does not exceed about 1 per cent of stalks examined."

Michigan W. R. Walton (Bureau of Entomology October 20). "At the present writing five new towns have been found infested in southeastern Michigan, all contiguous to the territory of last year."

SMARTWEED BORER (Pyrausta ainsliei Heinr.)

Indiana J. J. Davis (October 20). "This pest, occurring in the upper parts of cornstalks, has been sent in several times the past month mistaken for the corn borer."

Iowa C. J. Drake (October 3). "This pest is very common in this State."

CHINCH BUG (Blissus leucopterus Say)

Indiana J. J. Davis (October 20). "Chinch bugs are abundant in their hibernating quarters. They extended their northern range to include most every county in the northern tier. The latest report is that they occurred in numbers in the western part of Lake County, the extreme northwestern county of the State."

Illinois W. P. Flint (October 20). "Heavy flights of bugs to winter quarters occurred on the 4th, 5th, and 6th and again on the 20th of this month."

Nebraska M. H. Swenk (October 1). "Conditions during September were favorable for the chinch bugs and, at the present time, they are abundant in the cornfields in two widely separated areas of infestation, one of which is along the southern border of the State and includes chiefly southern Gage, Jefferson, and Thayer Counties, and the other involves chiefly Boyd County in the northeastern part of the State. The number present in these two areas is sufficient to form a menace for next season, provided favorable conditions for the bugs continue until that time."



CORN EARWORM (Heliothis obsoleta Fab.)

- Massachusetts L. H. Patch (September 30). "The corn earworm is doing considerable damage throughout Barnstable County. One quarter-acre field of sweet corn at Chatham showed 100 per cent infestation, twenty stalks averaging 5 worms to the stalk, including ears with a maximum of 13."
- Connecticut B. H. Waldon (October 18-21). "The abundance of this pest about Botsford and Hamden is less than last year, 12 per cent of the crop being damaged."
- Maryland C. C. Hamilton (September 26). "This insect is reported as attacking lima beans at places around Cambridge, Md., eating holes into bean pods and beans inside the pods. Twenty-two per cent of the crop has been damaged. No eggs, pupae, or adults were noticed but larvae were common. One badly infested field was bordered on two sides by field corn, but dusting would probably do little or no good. It is intended to try poisoned bran mash."
- Iowa C. N. Ainslie (October 11). "While the injury from the corn earworm has been only moderately great during the past season, the moths have been attracted to lights recently in large numbers, showing that the pest is still actively present."
- Texas F. C. Bishopp (October 28). "This insect is somewhat more destructive this year than usual. A number of fields examined in Dallas County showed practically 100 per cent infestation of the ears in every instance."
- Idaho Claude Wakeland (October 19). "The corn earworm has been a serious pest to field and sugar corn in Cassia and Twin Falls Counties this year."

A STALK-BORER (Diatraea lineolata Walk.)

- New Mexico J. R. Horton (October 16). "Abundance of this pest was more than usual over eastern New Mexico from August 15 to September 30. From 20 to 100 per cent of the crop was infested from Romero, Tex., southwesterly through Tucumcari to Santa Rosa, thence north to Las Vegas and southward from Tucumcari to Portales. Milo and red amber sorghum were found injured to the extent of about 6 to 7 per cent. The weather was exceptionally hot and dry."

FALL ARMYWORM (Laphygma frugiperda S. & A.)

- Indiana J. J. Davis (October 20). "The fall armyworm was abundant, attacking corn at Aurora, Ind., October 3. This is the only report accompanied by specimens or reliable data."





- Iowa C. J. Drake (September 14). "A field of 7 acres of timothy was damaged to the extent of 75 per cent in Allamakee County."
- Kansas F. M. Wadley (October 16). "This pest proved to be much more abundant as compared with the average year and much less abundant in October than in August and September. The weather was exceptionally hot and dry. Damage by tunneling was 25 per cent."
- New Mexico J. R. Horton (October 16). "This pest was unusually abundant over eastern New Mexico from August 15 to September 30. The weather during this period was exceptionally hot and dry. From 20 to 100 per cent of the crop was infested from Romero, Tex., southwesterly through Tucumcari to Santa Rosa, thence north to Las Vegas and southward from Tucumcari to Portales, the infestation being shared about equally with Diatraea lineolata. This pest tunnels into the buds, ears, and stalks like the corn borer in this territory."

ARMYWORM (Cirphis unipuncta Haw.)

- Iowa C. M. Ainslie (October 11). "Armyworm moths have been quite numerous about lights in this vicinity during September, although no serious injury has been reported in this part of the State this season."
- Carl J. Drake (September 21). "This pest was reported as attacking popcorn in Polk County."

DINGY CUTWORM (Feltia subgothica Haw.)

- Iowa C. M. Ainslie (October 11). "Moths of the common cutworm have been unusually plentiful at lights here this summer and fall. Very little damage has been reported from this species during the past season."



## FRUIT INSECTS

### APPLE

#### APPLE APHID (Aphis pomi DeG.)

- Connecticut F.A.Bartlett (September 19). "The worst infestation of plant-lice I have ever known, particularly on apples."
- Tennessee S.Marcovitch (October 18). "The oviparous females are beginning to appear and a few are full grown. No eggs deposited as yet."

#### ROSY APPLE APHID (Amuraphis roseus Baker)

- Tennessee S.Marcovitch (October 18). "Winged fall migrants were observed on apple together with first stages of young oviparous forms. A fall migrant was also found out of doors on narrow-leaved plaitain."

#### GODLING MOTH (Carpocapsa pomonella L.)

- Illinois C.C.Compton (September 15). "The second brood of the codling moth has been numerous in unsprayed orchards. Fifty to 100 per cent of the apples are wormy. Two orchards in Cook County, which were sprayed July 15, are heavily infested; on some trees 90 per cent of the apples are wormy."
- W.P.Flint (October 20). "The weather was very favorable for late second-brood and third-brood larvae, causing more than normal damage to fruit during August and September."
- Washington E.J.Newcomer (October 10). "The insect appears to be much worse as compared with average year, 22 per cent of the crop being damaged."
- Oregon M.A.Yothers (October 11). "Owing to a very light crop of apples and ideal weather conditions for codling-moth development the percentage of wormy and stung fruit is very high this season, running from 50 to 90 per cent. Practically no injury occurred after September 15. Uninterrupted ideal weather throughout the summer for moth development has resulted in three broods, the third much lighter than the other two."

#### HAG MOTH (Phobetron pithecium S. & A.)

- Connecticut W.E.Britton (October 24). "This insect was found in Shelton, Guilford, and Greens Farms. Rather more abundant than in an average year."
- Georgia Oliver I. Snapp (October 5). "Some ornamental bushes on lawns of Fort Valley have been defoliated by larvae of the hag moth."





APPLE AND THORN SKELETONIZER (Hemerophila pariana Clerck)

- Massachusetts B.A.Porter (September 25). "Not noted in this section Huntington and Chesterfield last year, and has probably reached this region within the last year or so. Now present in small numbers."
- E.T.Fernald (October 20). "The apple and thorn skeletonizer has appeared at Amherst, and the moths were very abundant on October 16 to 19. Their work has been observed also, to some extent, but apparently is not abundant enough to account for the swarms of moths. Mr. Bennett A. Porter of Wallingford has suggested to me that it was very possibly a migrating flight northward from Connecticut."
- A.G.Davis (September 15). "Have not noted any eating birch but it has been causing considerable damage to apple in Litchfield County."
- W.E.Britton (September 16). "Commercial sprayed orchards not much injured, unsprayed trees now brown. Less destructive than last year in Greenwich and Stamford where the pest first appeared in the State. Not serious around Storrs (J.A.Manter). Not noticed around Rockville (E.D.Tucker)."
- F.A.Bartlett (September 19). "Trees thoroughly sprayed in spring are in good condition with possibly a slight injury on the tips of the later growth at Stamford."
- E.M.Eves (September 20). "One of the pronounced pests of late season in Meriden."
- C.D.Clark, County Agent (September 21). "Reports this insect more prevalent than it was last year in the entire County of Fairfield."
- G.H.Hollister (September). "I have not noticed that this insect is very general on apples at Windsor and Hartford."
- Philip Garman (October 24). "Adult moths exceedingly numerous in September and October at New Haven."

FALL WEBWORM (Hyphantria cunea Drury)

- Delaware C.O.Houghton (September 1). "The status of this insect is about the same as during the average year."

FALSE APPLE RED BUG (Lygidea mendax Reut.)

- Connecticut F.A.Bartlett (September 19). "Never had so much trouble with red bug injury as this year, possibly due to the fact that there is a limited number of apples in this part of Fairfield County, and practically all knurled."



A LEAFHOPPER (species undetermined)

Oregon

M.-A.-Yothers (October 11). "Greatest infestation of a leafhopper in the past five years since the writer has been here. Leaves of Newt apples have sickly appearance and fruit specked with leafhopper excrement. Increased in numbers up to October 1."

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Illinois

W.P.Flint (October 20). "Damage by this scale has been much more severe than usual throughout the southern Illinois orchard districts. Many orchards where the scale has been held under control for a number of years have had the fruit seriously damaged from spotting by the scale."

Oregon

M.-A.-Yothers (October 11). "In a good many orchards the loss from this insect was from 5 to 15 per cent, even where spraying had been done. The insect is not general over the valley."

PLUM CURCULIO (Conotrachelus nemophar Hbst.)

Connecticut

W.H.Darrow (September 21). "Apparently one of the worst apple pests in Tolland and New London Counties this year, being much worse than last year. Unsprayed apples damaged 100 per cent."

PEACH

A SAWFLY (Eriocampoides sp.)

Louisiana

T.H.Jones (September 14). "Larvae of this sawfly causing noticeable amount of damage to leaves of peach trees in yards in Baton Rouge."

PEACH-TREE BORER (Aegeria exitiosa Say)

Georgia

Oliver I. Snapp (October 19). "Thousands of pounds of paradichlorobenzene will be put out this week by Georgia peach growers for the peach borer. Many are taking chances on tree injury and using the material on young trees."

SHOT-HOLE BORER (Scolytus rugulosus Ratz.)

Georgia

Oliver I. Snapp (October 9). "Adult bark-beetles have been feeding at the buds on peach twigs, causing exudation of gum. The attack has frequently been made on healthy trees, but generally on those near an old neglected orchard or strip of woodland."

PLUM CURCULIO (Conotrachelus nemophar Hbst.)

Georgia

Oliver I. Snapp (October 7). "The first adult of the third generation left the soil in the insectary today. This is believed to be the first record of third-generation adults of C. nemophar, being bred from peach. A large percentage of the adults in the field have now





entered hibernation quarters. Some of the adults that transform late in the season make no attempt to work their way out of the soil, and it is believed that these late beetles remain in their pupal cells during the winter and do not liberate themselves until spring."

BLUM

SNOWY TREE CRICKET (Oecanthus niveus DeG.)

Idaho

Claude Wakeland (October 19). "The snowy tree cricket caused softening and rotting of prunage in a large commercial orchard at Parma. Decay starts in feeding punctures. Loss in orchard estimated last year 50 per cent, but has not been so severe this year owing, supposedly, to females being killed by early freeze last year before eggs were laid. Females are now heavy with eggs and are probably ovipositing."

~~ACHEMEN~~ SPHINX (Pholus achemon Drury)

Wisconsin

S.B. Fracker (August 10). "Damage slight but the large caterpillars attracted considerable attention."

BUMBLE FLOWER BEETLE (Euphoria inda L.)

Michigan

R.H. Pettit (September 27). "The bumble flower beetles are causing more trouble than usual this year in Michigan with ripening fruit."

GRAPE LEAFHOPPER (Erythroneura comes Say)

Delaware

C.O. Houghton (August 1). "This insect is reported from Newark and is about the same as during an average year."

CITRUS

CITRUS WHITEFLY (Dialeurodes citri Ashm.)

Louisiana

T.H. Jones (October 16). "Adults, which had been abundant for some time previous, disappeared after cool spell beginning October 8."

A VOCADO WEEVIL (Heilipus perseae Barber)

Canal  
Zone

James Zetek (October 6). "Heilipus perseae Barber is one of the most serious pests of avocado fruit, and is more abundant than it was last year."

AVOCADO STENOMA (Stenoma catenifer Wals.)

Canal  
Zone

James Zetek (October 6). "One of the two most serious pests of avocado fruit; is very much more abundant this year than last."





## TRUCK - CROP INSECTS

### MISCELLANEOUS FEEDERS

#### A MYRIAPOD (Parajulus coeruleocinctus Wood)

New York C.R.Crosby (September 12). "Reported crawling into vegetables, boring in and doing a large amount of damage."

#### SALT-MARSH CATERPILLAR (Estigmene acrea Drury)

Delaware C.O.Houghton (September 22). "But few examples of this species have been observed here lately."

### POTATO

#### FALSE CHINCH BUG (Nysius ericae Schill.)

Idaho Claude Wakeland (September 26). "All injury to potatoes from the false chinch bug apparently has ceased since the cooler weather, which has been accompanied by rain generally throughout the southeastern part of the State."

#### TARNISHED PLANT-BUG (Lycus pratensis L.)

Idaho Claude Wakeland (September 26). "The tarnished plant-bug injury to potatoes has apparently ceased since the cooler weather which has been accompanied by rain generally throughout the southeastern part of the State."

### CABBAGE

#### CABBAGE SNAKE (Mermis sp.)

Indiana J.J.Davis (October 20). "The cabbage snake was first reported to us this year on September 30, attacking cabbage."

#### CABBAGE LOOPER (Autographa brassicae Riley)

Connecticut M.P.Zappe (October 6). "This insect was reported from Hamden, New Haven County."

#### ZEBRA CATERPILLAR (Manestra picta Harr.)

Idaho Claude Wakeland (October 19). "The zebra caterpillar is attacking cabbage quite freely in truck gardens in Canyon County."

#### IMPORTED CABBAGE WORM (Pontia rapae L.)

Georgia Oliver I. Snapp (October 9). "The cabbage worms appear to be unusually abundant on late cabbage in gardens of central Georgia this year, and considerable damage has resulted."

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PEANS

MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

- North Carolina Neale F. Howard (October 7). "A report has been received that the Mexican bean beetle has been found in Macon County."
- Neale F. Howard (October 21). "The Mexican bean beetle has been reported from Henderson, Jackson, and Transylvania Counties."
- Tennessee Neale F. Howard (September 25). "A report has been received that the Mexican bean beetle has been found in Claiborne County."
- Kentucky Neale F. Howard (September 30). "The Mexican bean beetle has been found in Allen, Barren, Hart, Metcalf, and Monroe Counties. Unmistakable feeding of this insect found in Hart County, but no stage of insect present at the time of inspection."
- Neale F. Howard (October 7). "Green, Hardin, Hart, Lenoir, and Taylor Counties report Mexican bean beetle infestation. In Hardin and Hart Counties the insect was not found, but evidence of feeding."
- Neale F. Howard (October 21). "The Mexican bean beetle has been found in Fayette, Franklin, Marion, Washington, and Woodford Counties."

PEAS

PEA APHID (Illinoia pisi Kalt.)

- Maryland C.C. Hamilton (September 26). "Nymphs abundant, stunting of growth of terminals, also curling beginning to show in some fields. Indications for considerable damage later. Some experimental dusting with nicotine dust, about 75 per cent killed. A few lady beetles and syrphids were also observed."

CUCUMBER

BANDED CUCUMBER BEETLE (Diabrotica balteata Lec.)

- Alabama & Mississippi K.L. Cockerham (October 17). "More serious damage than that caused by any Diabrotica of this section. This pest promises to become one of the chief truck-crop pests of the South."
- Louisiana T.H. Jones (October 16). "Adults of this species have continued to be noticeably abundant on various vegetable crops since the date of last report (September 15)."





MELONS

MELON APHID (Aphis gossypii Glover)

Nebraska M.H.Swenk (October 1). "In western Nebraska the melon aphid was normally destructive up to at least the middle of the month."

SQUASH

SQUASH BORER (Melittia satyriniformis Huebn.)

Nebraska M.H.Swenk (October 1). "The squash vine-borer was persistently reported as injuring squashes up to early September."

TURNIP

TURNIP APHID (Rhopalosiphum pseudobrassicae Davis)

Louisiana T.H.Jones (October 16). "Becoming noticeably abundant as it usually does at this time each year."

LETTUCE

ZEBRA CATERPILLAR (Mamestra picta Harr.)

Idaho Claude Wakeland (September 26). "Mamestra picta is injurious to a limited extent upon sugar beets, and to a greater degree upon lettuce. It has been reported from Franklin County, Canyon County, and Bingham County."

CARROT BEETLE (Ligyrus gibbosus DeG.)

Idaho Claude Wakeland (September 26). "A pest which is proving to be of considerable importance in restricted localities in this State is the carrot beetle Ligyrus gibbosus DeG. It has been reported injurious to head lettuce in Canyon County. Reports coming from Mr. Don B. Whelan, extension entomologist, and farmers indicate that about one-third of the stand was destroyed in certain fields. Injury is caused by the adults eating off the main roots below the surface of the ground."

PEANUT

A PRIONID BEETLE (Hemaesthesis sp.)

Louisiana T.H.Jones (September 8). "Larvae sent in with report that they were injuring peanuts in newly cut-over pine lands."



# SOUTHERN FIELD CROP INSECTS

## COTTON

### COTTON WORM (Alabama argillacea Huebn)

Michigan R.H.Pettit (September 27). "This pest has recently appeared at South Haven, according to a report from Mr. Stanley Johnston, Superintendent of the Experiment Station."

### BOLL WEEVIL (Anthonomus grandis Boh.)

Tennessee S.Marcovitch (October 19). "Larvae, pupae, and adults were discovered in an experimental patch of cotton on the grounds at Knoxville. This infestation shows the remarkable power of the boll weevil to spread, for the nearest cotton patch as far as is known is located at Madiennville, about 40 miles south."





## FOREST AND SHADE - TREE INSECTS

### GENERAL FEEDERS

#### FALL WEBWORM (Hyphantria cunea Drury)

Nebraska M. H. Swenk (October 1). "The threatened defoliation of shade trees by the last brood of the fall webworm did not develop with the expected severity."

#### FOREST TENT CATERPILLAR (Malacosoma disstria Huebn.)

Idaho J. C. Evenden. "Every shrub in northern Idaho was heavily attacked by this insect during the past season, an increase of 100 per cent."

### LINDEN

#### HICKORY APHID (Longistigma carvae Harr.)

New York C. R. Crosby (August 11). "Infested specimens of basswood were received from Hamburg on this date."

### SUGARBERRY TREE

#### BARNACLE SCALE (Ceroplastes cirripediformis Comst.)

Georgia O. I. Snapp (October 9). "This scale is killing many sugarberry trees used for shade purposes in the City of Columbus, Ga. Most of the infestations have reached the encrusted stage. Residents are making an effort to have the city authorities undertake control measures."

### JUNIPER

#### JUNIPER WEBWORM (Ypsolophus marginellus Fab.)

Missouri L. Haseman (October 7). "Our attention has been called to only one infestation by this webworm in the State, but on some of the Irish junipers considerable damage has been done."

### BIRCH

#### BIRCH LEAF-SKELETONIZER (Bucculatrix canadensisella Chamb.)

Wisconsin Simon Maloney (September 20). "This is said to be a new pest here. Birch leaves are skeletonized throughout northern Marinette County."

### BOXELDER

#### BOXELDER PLANT-BUG (Leptocoris trivittatus Say)

Indiana J. J. Davis (October 20). "The boxelder bug was reported, September 29, from Linden, as a pest of considerable annoyance in houses."

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Iowa

C. N. Ainslie (October 11). "There has been a marked increase in the numbers of the boxelder bug during the past year and at this date the adults are swarming everywhere. Besides the damage they may do to trees they are a great nuisance, invading houses and colonizing in porches."

#### CATALPA

##### A MEALYBUG (Pseudococcus comstocki Kuw.)

New York

E. P. Felt (September 25). "Specimens just at hand indicate an unusual abundance of what is presumably the Japanese mealybug on catalpa, at North Pelham, Westchester County, the crevices of the bark and holes in the trees being more or less filled with a white, mealy material containing immense numbers of the minute, yellowish orange larvae."

#### ELM

##### ELM LEAF-BEETLE (Galerucella luteola Muell.)

New Jersey

C. E. Cobb (July 25). "This insect was found attacking elm at East Orange." (August 7). "Elm trees found to be attacked by this insect at Montclair."

##### ELM BORER (Saperda tridentata Oliv.)

Nebraska

M. H. Swenk (October 1). "Serious injury to elms and poplars by the elm borer continued through the month."

#### LARCH

##### LARCH CASE-BEARER (Coleophora laricella Huebn.)

Maine

H. B. Pierson (August). "Infestation by the larch case-bearer is assuming epidemic form. Large areas of larch appeared as if struck by fire early in the season."

#### MAPLE

##### A LEPIDOPTERON (Paraclemensia acerifoliella Fitch)

New York

E. P. Felt (September 23). "This insect has been locally abundant and somewhat injurious to sugar maples in both St. Lawrence and Warren Counties."

##### WOOLLY MAPLE-LEAF SCALE (Phenacoccus acericola King)

Connecticut

W. E. Britton (October 24). "This insect is attacking sugar maples about Bristol, New London, Stratford, Glastonbury, and New Haven."

##### COTTONY MAPLE SCALE (Pulvinaria vitis L.)

New Jersey

C. E. Cobb (June 25). "This scale is attacking maples at Maplewood." (June 28). "It is also attacking maples at Westfield."

It is a pleasure to have you here. The weather is very nice today. I hope you are well. I am well and hope you are the same. I am looking forward to seeing you again.

Very truly,  
Your friend,  
John Doe

Enclosed please find the check for the amount of \$100.00.

I have been thinking about you a great deal lately. I hope you are doing well. I am well and hope you are the same. I am looking forward to seeing you again.

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POPLAR

POPLAR BORER (Saperda calcarata Say)

Nebraska M. H. Swenk (October 1). "Serious injury to elms and poplars by the poplar borer continued through the month."

SPRUCE

SPRUCE BUDWORM (Harmolosa fumiferana Clem.)

Maine H. B. Pierson (July 1922). "The outbreak of this pest is waning, but was, undoubtedly, one of the most serious ever recorded in North America. The budworm was followed by bark-beetles and fungi. More than 33-1/3 per cent of fir and spruce trees damaged."

Idaho J. C. Evenden (June). "Large areas of forest land in the northern half of the State have been seriously injured during the past season by this insect."

PINE LEAF SCALE (Hemichionaspis pinifoliae Fitch)

Indiana J. J. Davis (October 20). "What was supposedly this insect has been reported as damaging spruce at Indianapolis and Fort Wayne."

WILLOW

IMPORTED POPLAR AND WILLOW BEETLE (Plagiodera versicolora Laich)

New Jersey C. E. Cobb (July 14). "Willows are being attacked by this beetle at Hillside."



# GREENHOUSE AND ORNAMENTAL

## PLANT INSECTS

### MISCELLANEOUS FEEDERS

#### JAPANESE BEETLE (Popillia japonica Newm.)

New Jersey (Bur. Ent. News Letter No. 101, September). "Recent preliminary examinations for the presence of Japanese beetle larvae in fields in the vicinity of the laboratory show a heavy increase in the number of grubs compared with the number present a year ago this time, in some cases running as high as 100 per cent or more increase. It is expected that the regular grub survey to be made a little later in the fall will show a general increase in density of grub infestation throughout the infested territory as a whole."

"A serious injury to a number of the greens in local golf courses, as a result of the abundance of Japanese beetle larvae, has been found. The greens offer ideal facilities for egg depositions by the beetle during the season, and it is quite apparent that the effect of these heavy egg depositions will be serious, possibly necessitating the rebuilding of infested greens."

#### COMMON MEALYBUG (Pseudococcus citri Risso)

Indiana J. J. Davis (October 20). "The usual numerous fall reports of mealybugs on coleus and other house and garden plants have been received the past month."

#### COSMOS WEEVIL (Boris confinis Lec.)

Michigan C. A. Weigel (October 2). "Report on cosmos weevil was received from Detroit as attacking roots and top of stalks of helenium, eventually destroying the entire top of the plant if not checked."

#### A STALK-BORER (Papaipema sp.)

Ohio C. A. Weigel (October 2). "This insect is reported from Columbus as seriously injuring Delphinium belladonna."

#### MARGUERITE FLY (Azomyza maculosa Mall.)

Pennsylvania C. A. Weigel (October 2). "Report on Azomyza maculosa (Malloch) as a very serious pest in greenhouses at Parker Ford, Pa. Specimens of leaves were sent in with dead spots, each spot containing one or more little worms which had eaten between the two layers of leaf."

### ASTERS

#### A KATYDID (Microcentrum sp.)

Pennsylvania C. A. Weigel (October 2). "Record of this species occurring in Reading, Pa., as attacking asters. Received specimen of aster stem which was infested with eggs of katydid."





FERN

HEMISPHERICAL SCALE (Saissetia hemisphaerica Targ.)

Louisiana T. H. Jones (October 10). "Specimens of maidenhair fern were sent in from Alexandria, La., with request for remedy."

FERN CATERPILLAR (Callopistria floridensis Guenée)

Louisiana T. H. Jones (October 12). "Larvae were sent in from Donaldsonville, La., with request for information as to control. What is probably this species has also been reported as causing injury to ferns in Baton Rouge."

CHRYSANTHEMUM

CHRYSANTHEMUM GALL-FLY (Diarthronomyia hypogaea L.)

Illinois C. C. Compton (September 29). "This gall-fly is causing severe injury to chrysanthemums in one greenhouse at Aurora. This insect was brought in on a shipment of chrysanthemums from Lincoln, Ill."

Mississippi D. W. Grimes (Quarterly Bulletin State Plant Board, Vol. 2, April to July, 1922, Nos. 1-2). "Specimens of chrysanthemums severely infested with the chrysanthemum gall midge were recently received from two greenhouses in Mississippi. In both cases the plants had been purchased originally from firms in Illinois. A few days later five infested shipments from Pennsylvania were intercepted. This is the first recorded occurrence of this pest in this State."

SPITTLE INSECTS (Cercopidae)

Mississippi K. L. Cockerham (October 16). "These insects were on practically every stem of a patch of chrysanthemums in Biloxi. Considerable damage is being done."

CYCLAMEN

CYCLAMEN MITE (Tarsonemus pallidus Banks)

Illinois C. A. Weigel (October 2). "Reports of this mite from different localities in this State were received." (October 30) "An individual in Oak Park lost about 10,000 cyclamen plants during the past summer due to the injuries of this pest."

Pennsylvania C. A. Weigel (October 30). "This pest was recently reported from Philadelphia, Pa., as injuring snapdragons."

IVY

IVY SCALE (Aspidiotus hederæ Vallot)

New York C. R. Crosby (August 31). "This scale is infesting ivy about New York City."



MAGNOLIA

MAGNOLIA SCALE (Neolecanium cornuparvum Thos.)

New York C. R. Crosby (August 17). "Infested specimens of magnolia were received from Mt. Vernon."

ROSE

A LEAFHOPPER (Graphocephala coccinea Forst.)

Nebraska M. H. Swenk (October 1). "In Lancaster County, during the middle of September, there was some injury to rose foliage by this leafhopper."

ROSE MIDGE (Dasyneura rhodophaga Coq.)

Virginia,  
NEW York, and C. A. Weigel (October 30). "Reports have been received recently from these States of serious injuries due to the rose midge, Dasyneura rhodophaga (Coq.)."

ORCHID

ORCHID FLY (Eumotoia (Isosoma) orchidearum Westw.)

Missouri C. A. Weigel (October 30). "This pest is reported from St. Joseph."

Massachusetts C. A. Weigel (October 30). "This pest is reported from Nahant, Mass., as doing serious injury to orchids."





# INSECTS INFESTING DOMESTIC ANIMALS

## HORN FLY (Haemaphysalis irritans L.)

Texas F. C. Bishopp (October 28). "Horn flies have not given the usual amount of trouble to dairy and range stock this fall owing to continued dry weather. The average number of flies per animal on dairy herds in the vicinity of Dallas ranges from 10 to 300."

## HORSE BOT-FLY (Gastrophilus intestinalis DeG.)

Texas F. C. Bishopp (October 28). "This fly has increased in numbers materially during September and is still depositing eggs in great numbers at this date."

Maryland J. A. Hyslop. "This insect has been more troublesome this year than during the past three years in southeastern Montgomery County. Clipping of the eggs from horses was necessary up to the middle of October."

## NOSE BOT-FLY (Gastrophilus nasalis L.)

Texas F. C. Bishopp (October 28). "The nose botfly began to appear in the vicinity of Dallas in August and became very numerous toward the latter part of September. They are still annoying horses to some extent on this date."

## SCREWORM (Chrysomya macellaria Fab.)

Texas F. C. Bishopp (October 28). "Mr. D. C. Parman reports comparatively few cases of the screwworm in live stock in Uvalde and adjacent counties. There were more cases in September and early October following shearing of sheep and goats in the hilly country north of Uvalde than with many other classes of live stock on the ranges to the south. Mr. O. G. Babcock reports very few cases of the screwworm in Sutton and adjoining counties this fall. This is due to drought, the flies being practically killed out during the summer months. Screwworm flies are comparatively scarce in the vicinity of Dallas, and cases of screwworm injury very few."

## BROWN DOG TICK (Rhipicephalus sanguineus Latr.)

Texas F. C. Bishopp (October 28). "This very troublesome pest was found for the first time in Dallas this fall. It was not known heretofore north of San Antonio. In this instance the infested animal was introduced from South Texas several months ago and the ticks have been thriving and multiplying here."



# INSECTS INFESTING HOUSES AND PREMISES

## WHITE ANTS (Reticulitermes flavipes Kol.)

Indiana J. J. Davis (October 20). "Injury to woodwork in a dwelling by white ants was reported October 10 from Peru, the northernmost point reporting injury. The white ant is an annual pest in the southern end of the State."

## BOOKLOUSE (Atropos divinatoria Muell.)

Indiana J. J. Davis (October 20). "Booklice are frequently reported. One report from Clinton on September 21 records a heavy infestation in a hair mattress and furniture."

Nebraska M. H. Swenk (October 21). "Excepting for last fall, stored-grain pests are more numerous in the farm granaries and small elevators of Nebraska this fall than for any time during the past fifteen years. In some cases the infestation includes psocids."

## ARGENTINE ANT (Iridomyrmex humilis Mayr)

Texas F. C. Bishopp (October 28). "A rough survey of the area in the city of Dallas infested by the Argentine ant was made during September. There are now five different areas infested, totalling about 114 blocks. A rough survey made in 1918 showed that at that time there were at least 40 blocks infested."

## HOUSE FLIES (Musca domestica L.)

Texas F. C. Bishopp (October 28). "House flies have increased considerably during late September and October, but they are less numerous than usual. This is probably due to the protracted summer drought."

## YELLOW-FEVER MOSQUITO (Aedes aegypti L.)

Louisiana T. H. Jones. "The Louisiana State Board of Health reported, up to October 21, 3,892 cases, with the number of infested areas placed at 40." (The cases referred to are of dengue fever).

Texas F. C. Bishopp (October 28). "While this mosquito was apparently no more numerous than usual, much attention was attracted to it by the unprecedented outbreak of dengue fever which swept the South. The epidemic began in the cities of North Texas early in August and reached its height about September 15. Many cases continued to occur through September and October, although the number of cases reported to the Health Department dropped off during the latter month. During August the number of cases reported in Dallas was 54, in September 2,882, and in October 540. At least three deaths due to dengue with complications have occurred in Dallas. The disease is no more severe in Dallas than in any other Texas cities; Galveston, Houston, Waco, and Ft. Worth each had several thousand cases."

